User Manual

Read and understand this manual before using machine.

13” PLANER

Model Number
40100

C US

STEEL CITY TOOL WORKS

VER. 01.11

Manual Part No. SC75013

THANK YOU for purchasing your new Steel City Planer. This planer has been designed, tested, and inspected with you, the customer, in mind. When properly used and maintained, your planer will provide you with years of trouble free service, which is why it is backed by one of the longest machinery warranties in the business.

This planer is just one of many products in the Steel City's family of woodworking machinery and is proof of our commitment to total customer satisfaction.

At Steel City we continue to strive for excellence each and every day and value the opinion of you, our customer. For comments about your planer or Steel City Tool Works, please visit our web site at **www.steelcitytoolworks.com** .

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INTRODUCTION

This user manual is intended for use by anyone working with this machine. It should be kept available for immediate reference so that all operations can be performed with maximum efficiency and safety. Do not attempt to perform maintenance or operate this machine until you have read and understand the information contained in this manual.

The drawings, illustrations, photographs, and specifications in this user manual represent your machine at time of print. However, changes may be made to your machine or this manual at any time with no obligation to Steel City Tool Works.

WARRANTY

STEEL CITY TOOL WORKS
2 YEAR LIMITED WARRANTY

Steel City Tool Works, LLC ("SCTW") warranties this "STEEL CITY TOOL WORKS" machinery to be free of defects in workmanship and materials for a period of 2 years from the date of the original retail purchase by the original owner. (Granite components are warranted for 10 years. Please inform SCTW within 30 days for any damages or defects on the Granite components found upon receipt of the products to qualify for the 10 year limited warranty. See the Granite warranty statement supplied with those products.)

Important Notice:

• Proof of Purchase must be present when requesting Warranty service.

• All warranty communications should be directed to Steel City Tool Works Technical Service 1-877-724-8665.

• Warranty Card must be completed and returned within 90 Days from original Purchase Date.

What is covered under the 2 year Limited Warranty:

• This warranty covers all defects in workmanship or materials and normal wear items such as motors, switches, cords, gears and bearings for 2 years following the date of purchase of the tool. Warranties on other Steel City Tools may vary.

How to get Service:

• To obtain service for this Steel City Tool you must return it; Freight Prepaid, or take in to an authorized service center for Steel City Tools. You may obtain the Service Location or Service Technician location nearest to you by calling (toll free) 1-877-724-8665.

• When requesting warranty service you must present the original dated sales receipt and Date code, which can be found on the original carton and machine body. SCTW will repair or replace, at its expense and at its option, any SCTW machine, machine part (Motor, Switch and Cords), or machine accessory which in normal use has proven to be defective.

What is not covered:

• This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising from normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than an authorized Service Center or Technician of Steel City Tool Works. Consumable accessories provided with the tool such as, but not limited to , brushes, blades, belts, bits are not covered.

• Steel City Tool Works make No Warranties, Representations or Promises as to the Quality or Performance of its Power Tools other than those specifically stated in this Warranty.

Except as set forth above, SCTW makes no express or implied representations or warranties with respect to its machinery, or its condition, merchant-ability, or fitness for any particular purpose or use. SCTW furnishes the above warranties in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose, which are hereby specifically disclaimed. SCTW shall not be liable for any (a) special, indirect, incidental, punitive or consequential damages, including without limitation loss of profits, arising from or related to this warranty, the breach of any agreement or warranty, or the operation or use of its machinery, including without limitation damages arising from damage to fixtures , tools , equipment, parts or materials, direct or indirect loss caused by any other party, loss of revenue or profits, financing or interest charges , and claims by any third person, whether or not notice of such possible damages has been given to SCTW; (b) damages of any kind for any delay by or failure of SCTW to perform its obligations under this agreement ; or (c) claims made a subject of a legal proceeding against SCTW more than one (1) year after such cause of action first arose.

The validity, construction and performance of this Warranty and any sale of machinery by SCTW shall be governed by the laws of the Commonwealth of Pennsylvania, without regard to conflicts of law's provisions of any jurisdiction. Any action related in any way to any alleged or actual offer, acceptance or sale by SCTW, or any claim related to the performance of any agreement including without limitation this Warranty, shall take place in the federal or state courts in Allegheny County, Pennsylvania.

WARRANTY CARD

Name _____
Street _____
Apt. No. _____
City _____ State _____ Zip _____
Phone Number _____
E-Mail _____
Product Description: _____
Model No.: _____ Serial No.: _____

NOTE: The **Proof of Purchase** must be submitted along with this card in order to have the Warranty to take into effect. Fail to submit the Proof of Purchase may invalidate your Product Warranty.

The following information is given on a voluntary basis and is strictly confidential.

1. Where did you purchase your STEEL CITY machine?
   Store: _____
   City: _____ Online: _____

2. How did you first learn of Steel City Tool Works?
   ___ Advertisement ___ Mail Order Catalog
   ___ Web Site ___ Friend
   ___ Local Store Other_____

3. Which of the following magazines do you subscribe to?
   ___ American Woodworker ___ Cabinetmaker
   ___ Canadian Woodworking ___ Family Handyman
   ___ Fine Homebuilding ___ Fine Woodworking
   ___ Journal of Light Construction ___ Old House Journal
   ___ Popular Mechanics ___ Popular Science
   ___ Popular Woodworking ___ Today's Homeowner
   ___ WOOD ___ Woodcraft
   ___ WOODEN Boat ___ Woodshop News
   ___ Woodsmith ___ Woodwork
   ___ Woodworker ___ Woodworker's Journal
   ___ Workbench Other_____

4. Which of the following woodworking / remodeling shows do you watch?
   ___ Backyard America ___ The American Woodworker
   ___ Home Time ___ The New Yankee Workshop
   ___ This Old House ___ Woodwright's Shop
   Other_____

5. What is your annual household income?
   ___ $20,000 to $29,999 ___ $30,000 to $39,999
   ___ $40,000 to $49,999 ___ $50,000 to $59,999
   ___ $60,000 to $69,999 ___ 70,000 to $79,999
   ___ $80,000 to $89,999 ___ $90,000 +

6. What is your age group?
   ___ 20 to 29 years ___ 30 to 39 years
   ___ 40 to 49 years ___ 50 to 59 years
   ___ 60 to 69 years ___ 70 + years

7. How long have you been a woodworker?
   ___ 0 to 2 years ___ 2 to 8 years
   ___ 8 to 20 years ___ over 20 years

8. How would you rank your woodworking skills?
   ___ Simple ___ Intermediate
   ___ Advance ___ Master Craftsman

9. How many Steel City machines do you own? _____

10. What stationary woodworking tools do you own?
    Check all that apply.
    ___ Air Compressor ___ Band Saw
    ___ Drill Press ___ Drum Sander
    ___ Dust Collection ___ Horizontal Boring Machine
    ___ Jointer ___ Lathe
    ___ Mortiser ___ Panel Saw
    ___ Planer ___ Power Feeder
    ___ Radial Arm Saw ___ Shaper
    ___ Spindle Sander ___ Table Saw
    ___ Vacuum Veneer Press ___ Wide Belt Sander
    Other_____

11. Which benchtop tools do you own? *Check all that apply.*
    ___ Belt Sander ___ Belt / Disc Sander
    ___ Drill Press ___ Band Saw
    ___ Grinder ___ Mini Jointer
    ___ Mini Lathe ___ Scroll Saw
    ___ Spindle / Belt Sander Other_____

12. Which portable / hand held power tools do you own?
    Check all that apply.
    ___ Belt Sander ___ Biscuit Jointer
    ___ Dust Collector ___ Circular Saw
    ___ Detail Sander ___ Drill / Driver
    ___ Miter Saw ___ Orbital Sander
    ___ Palm Sander ___ Portable Thickness Planer
    ___ Saber Saw ___ Reciprocating Saw
    ___ Router Other_____

13. What machines / accessories would you like to see added to the STEEL CITY line?
    _____
    _____

14. What new accessories would you like to see added?
    _____
    _____

15. Do you think your purchase represents good value?
    ___Yes ___ No

16. Would you recommend STEEL CITY products to a friend?
    ___ Yes ___ No

17. Comments:
    _____
    _____
    _____
    _____
    _____

CUT HERE

FOLD ON DOTTED LINE

PLACE
STAMP
HERE

Steel City Tool Works

4 NORTHPOINT CT.
BOLINGBROOK, IL 60440

FOLD ON DOTTED LINE

PRODUCT SPECIFICATIONS

Motor Specifications

Type	Universal
Amps	15
Voltage	120V
Phase	Single
Hertz	60
RPM	23000 ± 10% (No Load)

Product Specifications

Feed Rate	26 FPM
Maximum Thickness of Stock	6-in
Minimum Thickness of Stock	1/8-in
Maximum Depth of Cut @ 6-in	1/8-in
Maximum Depth of Cut @ 13-in	1/16-in
Minimum Length of Stock	7-in
Maximum Planing Width	13-in
Cutterhead Speed	10000 RPM
Number of Blades	2
Cutterhead Diameter	2-in
Table Size	13 x 9.3-in
Dust Port	2-1/2 & 4-in

Product Dimensions

Height	19-in
Width	20-in
Depth	24.5-in
Total Net Weight	55 lbs

Shipping Dimensions

Height	20-in
Width	22-in
Depth	16-in
Gross Weight	60 lbs

ACCESSORIES AND ATTACHMENTS

There are a variety of accessories available for your Steel City Product. For more information on any accessories associated with this and other machines, please contact your nearest Steel City distributor, or visit our website at: **www.steelcitytoolworks.com**.

DEFINITION OF TERMS

Cutterhead – A rotating piece of adjustable blades that removes material from the workpiece.

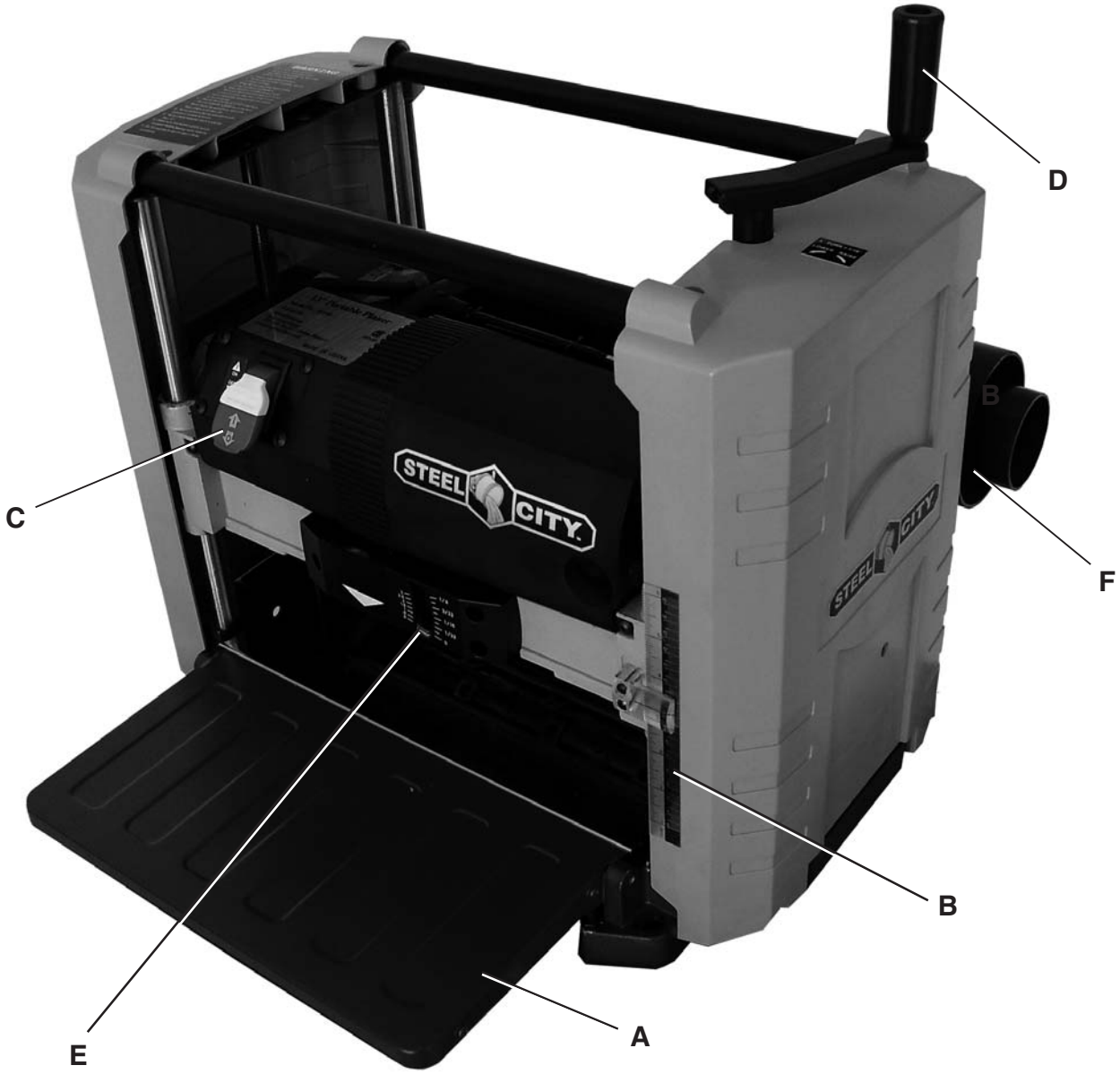
Gum, Pitch, or Resin – A sticky, sap based residue that comes from wood products.

Leading End – The end of the workpiece that is pushed into the planer first.

Snipe – Gouging or depression of the board at the ends. Snipe can occur at either the leading end of the board going into the planer, or at the end of the board as it exits the planer.

Workpiece – The piece of stock on which the work is being done.

FEATURE IDENTIFICATION



A. Infeed Table
B. Thickness Scale
C. Power Switch
D. Raise/Lower Handle
E. Depth-of-Cut Indicator
F. Dust Port

GENERAL SAFETY

⚠ WARNING

TO AVOID serious injury and damage to the machine, read and follow all Safety and Operating Instructions before assembling and operating this machine.

This manual is not totally comprehensive. It does not and can not convey every possible safety and operational problem which may arise while using this machine. The manual will cover many of the basic and specific safety procedures needed in an industrial environment.

All federal and state laws and any regulations having jurisdiction covering the safety requirements for use of this machine take precedence over the statements in this manual. Users of this machine must adhere to all such regulations.

Below is a list of symbols that are used to attract your attention to possible dangerous conditions.

⚠

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠ WARNING

Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

⚠ CAUTION

Indicates a potentially hazardous situation, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

⚠ WARNING

Exposure to the dust created by power sanding, sawing, grinding, drilling and other construction activities may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. The dust may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

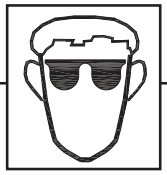
Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Always operate tool in well ventilated area and provide for proper dust removal. Use a dust collection system along with an air filtration system whenever possible. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

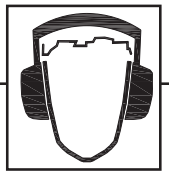
1. To avoid serious injury and damage to the machine, read the entire User Manual before assembly and operation of this machine.

⚠ WARNING



2. **ALWAYS** wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools.

⚠ WARNING



3. **ALWAYS** wear hearing protection. Plain cotton is not an acceptable protective device. Hearing equipment should comply with ANSI S3.19 Standards.

⚠ WARNING

4. **ALWAYS** wear a NIOSH/OSHA approved dust mask to prevent inhaling dangerous dust or airborne particles.

5. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an area that has slippery floor surfaces from debris, grease, and wax.

6. **ALWAYS** unplug the machine from the electrical receptacle when making adjustments, changing parts or performing any maintenance.

7. **AVOID ACCIDENTAL STARTING**. Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.

⚠ WARNING

8. **AVOID** a dangerous working environment. **DO NOT** use electrical tools in a damp environment or expose them to rain or moisture.

⚠ WARNING

9. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

10. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.

11. **DO NOT FORCE** the machine to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the machine was intended.

12. **DO NOT** stand on a machine. Serious injury could result if it tips over or you accidentally contact any moving part.

13. **DO NOT** store anything above or near the machine.

14. **DO NOT** operate any machine or tool if under the influence of drugs, alcohol, or medication.

15. **EACH AND EVERY** time, check for damaged parts prior to using any machine. Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breakage of all moving parts. Any guard or other part that is damaged should be immediately repaired or replaced.

16. Ground all machines. If any machine is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The third prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the third prong.

17. Keep visitors and children away from any machine. **DO NOT** permit people to be in the immediate work area, especially when the machine is operating.

18. **KEEP** protective guards in place and in working order.

19. **MAINTAIN** your balance. **DO NOT** extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. **MAINTAIN** all machines with care. **ALWAYS KEEP** machine clean and in good working order. **KEEP** all blades and tool bits sharp.

21. **NEVER** leave a machine running, unattended. Turn the power switch to the OFF position. **DO NOT** leave the machine until it has come to a complete stop.

22. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning the machine ON.

23. **SECURE** all work. When it is possible, use clamps or jigs to secure the workpiece. This is safer than attempting to hold the workpiece with your hands.

24. **STAY ALERT**, watch what you are doing, and use common sense when operating any machine. **DO NOT** operate any machine tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

25. **USE ONLY** recommended accessories. Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the machine. If in doubt, **DO NOT** use it.

26. **THE USE** of extension cords is not recommended for 230V equipment. It is better to arrange the placement of your equipment and the installed wiring to eliminate the need for an extension cord. If an extension cord is necessary, refer to the chart in the Grounding Instructions section to determine the minimum gauge for the extension cord. The extension cord must also contain a ground wire and plug pin.

27. Wear proper clothing, **DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. Users must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

28. **SAVE** these instructions and refer to them frequently and use them to instruct other users.

29. Information regarding the safe and proper operation of this tool is also available from the following sources:

    Power Tool Institute
    1300 Summer Avenue
    Cleveland, OH 44115-2851
    www.powertoolinstitute.org

    National Safety Council
    1121 Spring Lake Drive
    Itasca, IL 60143-3201

    American National Standards Institute
    25 West 43rd Street, 4th floor
    New York, NY 10036
    www.ansi.org

    ANSI 01.1 Safety Requirements for
    Woodworking Machines, and the U.S. Department
    of Labor regulations
    www.osha.gov

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PRODUCT SAFETY

1. Serious personal injury may occur if normal safety precautions are overlooked or ignored. Accidents are frequently caused by lack of familiarity or failure to pay attention. Obtain advice from supervisor, instructor, or another qualified individual who is familiar with this machine and its operations.
2. Every work area is different. Always consider safety first, as it applies to your work area. Use this machine with respect and caution. Failure to do so could result in serious personal injury and damage to the machine.
3. Prevent electrical shock. Follow all electrical and safety codes, including the National Electrical Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.

⚠ WARNING

4. **TO REDUCE** the risk of electrical shock. **DO NOT** use this machine outdoors. **DO NOT** expose to rain. Store indoors in a dry area.

5. **STOP** using this machine, if at any time you experience difficulties in performing any operation. Contact your supervisor, instructor or machine service center immediately.
6. Safety decals are on this machine to warn and direct you to how to protector yourself or visitors from personal injury. These decals **MUST** be maintained so that they are legible. **REPLACE** decals that are not legible.
7. **DO NOT** leave the unit plugged into the electrical outlet. Unplug the unit from the outlet when not in use and before servicing, performing maintenance tasks, or cleaning.
8. **ALWAYS** turn the power switch “OFF” before unplugging the jointer.

⚠ WARNING

9. **DO NOT** handle the plug or jointer with wet hands.

10. **USE** only accessories as described in this manual. **USE** accessories only recommended by Steel City.
11. **DO NOT** pull the jointer by the power cord. **NEVER** allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.
12. **DO NOT** unplug the jointer by pulling on the power cord. **ALWAYS** grasp the plug, not the cord.
13. **REPLACE** a damaged cord immediately. **DO NOT** use a damaged cord or plug. If the jointer is not operating properly, or has been damaged, left outdoors or has been in contact with water.
14. **DO NOT** use the jointer as a toy. **DO NOT** use near or around children.
15. **ENSURE** that the machine sits firmly before using. If the machine wobbles or is unstable, correct the problem by using shims or blocks prior to operation.
16. This machine is designed to process wood **ONLY**.

⚠ WARNING

17. **NEVER** position fingers or thumbs near the infeed roller.

18. Long pieces of stock should **ALWAYS** be supported with some type of fixture.
19. **DO NOT** operate jointer with dull or damaged blades.
20. **MAKE CERTAIN** that the jointer is properly adjusted prior to use.
21. **DO NOT** try and remove excessive amounts of wood in one single pass.
22. **INSPECT** all stock before planing, ensuring that there are no foreign objects embedded in the wood, loose knots, or knots that may become loose during operation.

⚠ WARNING

23. **DO NOT** attempt to remove jams until power is disconnected and all moving parts have come to a complete stop.

24. **MAKE SURE** that there is adequate operating space on both the infeed and outfeed sides of the jointer before operating.
25. **DO NOT** attempt to plane wood that is less than 7” long or less than 1/8-inch thick.

ELECTRICAL REQUIREMENTS

TO PREVENT electrical shock, follow all electrical and safety codes, including the National Electrical Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.

TO REDUCE the risk of electrical shock, **DO NOT** use machine outdoors. **DO NOT** expose to rain or moisture. Store indoors in a dry area.

DO NOT connect the machine to the power source before you have completed the set up process.

DO NOT connect the machine to the power source until instructed to do so.

The motors in these machines are designed to run on 115 volts.

GROUNDING INSTRUCTIONS

⚠WARNING

This machine **MUST BE GROUNDED** while in use to protect the operator from electric shock.

In the event of a malfunction or breakdown, **GROUNDING** provides the path of least resistance for electric current and reduces the risk of electric shock. The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

If a plug is provided with your machine **DO NOT** modify the plug. If it will not fit your electrical receptacle, have a qualified electrician install the proper connections to meet all electrical codes local and state. All connections must also adhere to all of OSHA mandates.

IMPROPER ELECTRICAL CONNECTION of the equipment-grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment-grounding conductor. **DO NOT** connect the equipment-grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

Check with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Fig. A

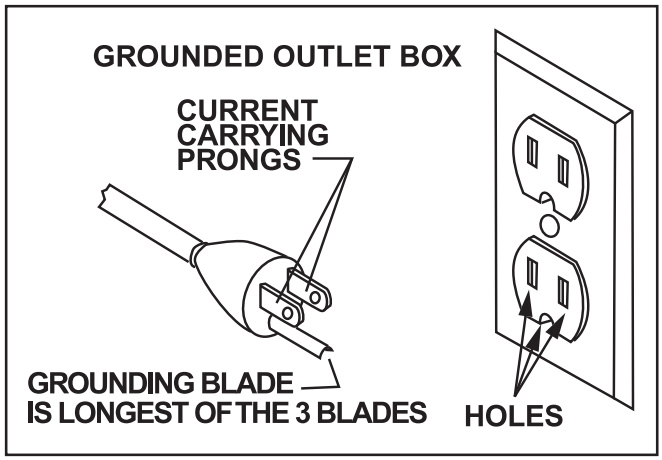
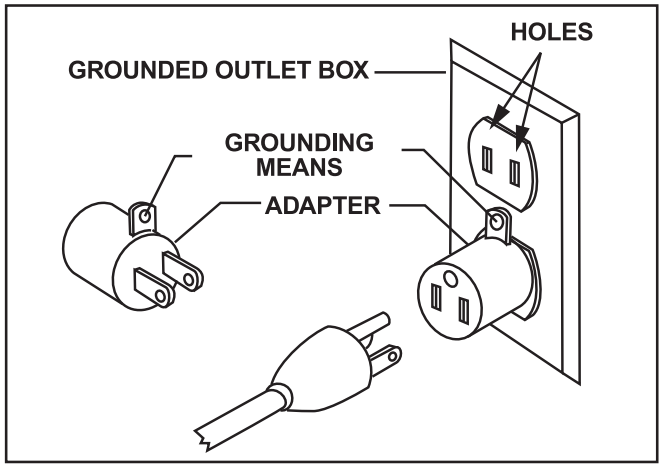


Fig. B



PLUGS / RECEPTACLES

⚠ WARNING

- Electrocution or fire could result if this machine is not grounded properly or if the electrical configuration does not comply with local and state electrical codes.
- **MAKE CERTAIN** the machine is disconnected from power source before starting any electrical work.
- **MAKE SURE** the circuit breaker does not exceed the rating of the plug and receptacle.

The motor supplied with your machine is a 115 volt, 60 hertz, single phase motor. Never connect the green or ground wire to a live terminal.

A machine with a 115 volt plug should only be connected to an outlet having the same configuration as the plug.

EXTENSION CORDS

⚠ WARNING

To reduce the risk of fire or electrical shock, use the proper gauge of extension cord. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw.

The smaller the gauge-number, the larger the diameter of the extension cord is. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.

⚠ CAUTION

USE ONLY a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the machine's plug.

If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.

Make certain the extension cord is properly sized, and in good electrical condition. Always replace a worn or damaged extension cord immediately or have it repaired by a qualified person before using it.

Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)				
115 VOLT OPERATION ONLY				
	25' LONG	**50' LONG**	**100' LONG**	**150' LONG**
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	18 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

UNPACKING & INVENTORY

Check shipping carton and machine for damage before unpackaging. Carefully remove packaging materials, parts and machine from shipping carton. Always check for and remove protective shipping materials around motors and moving parts. Lay out all parts on a clean work surface.

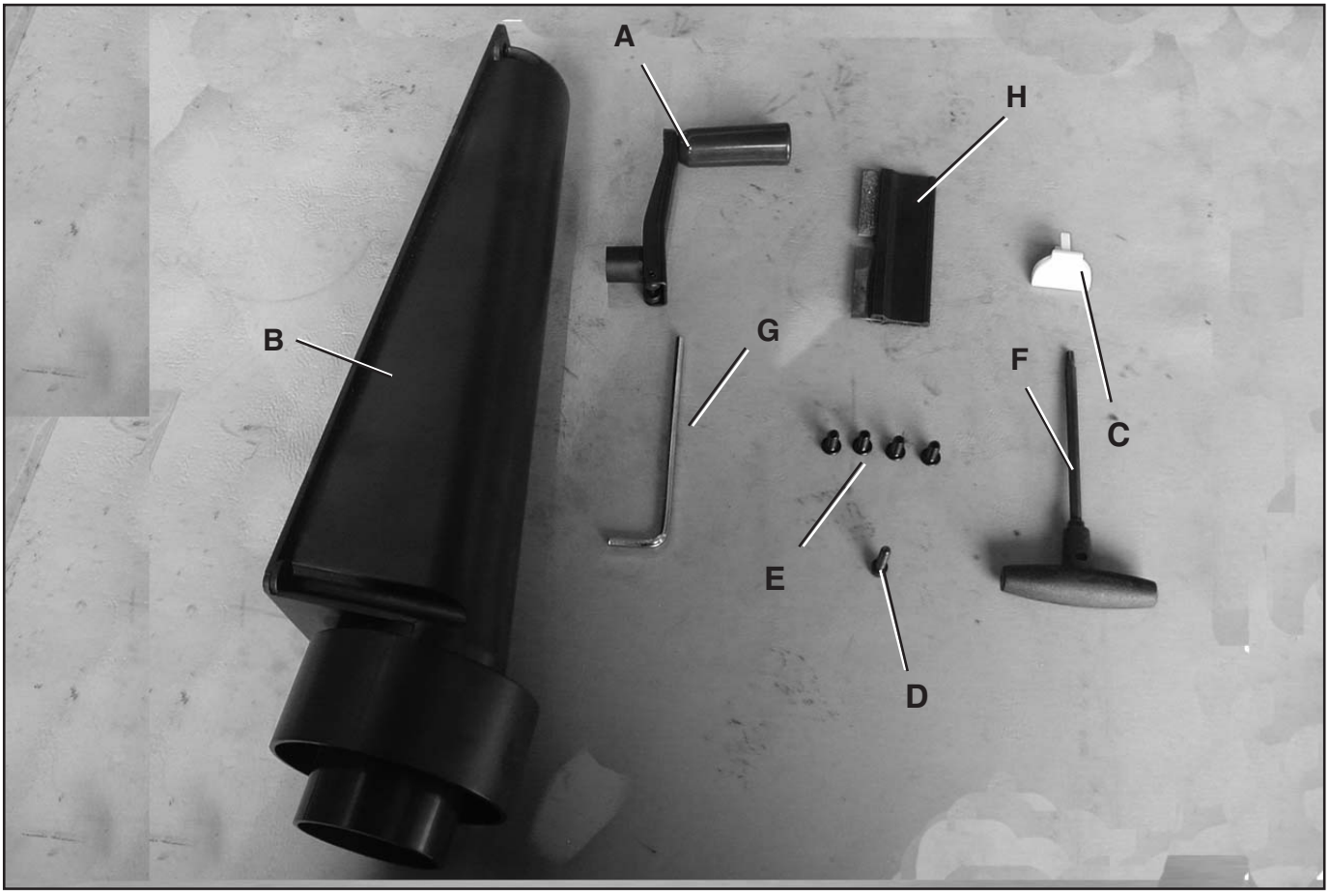
Remove any protective materials and coatings from all of the parts and the planer. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.

After cleaning, apply a good quality paste wax to any unpainted surfaces. Make sure to buff out the wax before assembly.

Compare the items to inventory figures; verify that all items are accounted for before discarding the shipping box.

⚠ WARNING

If any parts are missing, do not attempt to plug in the power cord and turn "ON" the machine. The machine should only be turned "ON" after all the parts have been obtained and installed correctly. **For missing parts, contact Steel City at 1-877-SC4-TOOL.**



A. Handle
B. Dust Port
C. Key
D. Hex Soc Head Screw
E. Hex Soc Head Cap Screw
F. Torx Wrech
G. Hex Wrech
H. Knife Removal Tool Assy

ASSEMBLY

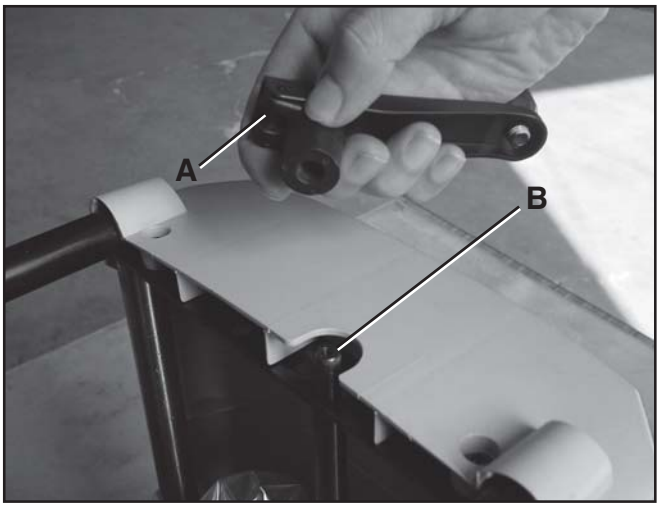
ATTACHING DEPTH ADJUSTMENT HANDLE

⚠WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

1. Attach the depth adjustment handle (A) to the shaft (B) and fasten in place with 1 Hex Soc Head screw. Tighten screw using supplied hex wrench. **SEE FIG 1.**

Fig. 1



ATTACHING DUST PORT

The Dust Port is to be used when the planer to be connected to a dust collector. It has a 4" port on it to accomodate most dust collection systems.

To install:

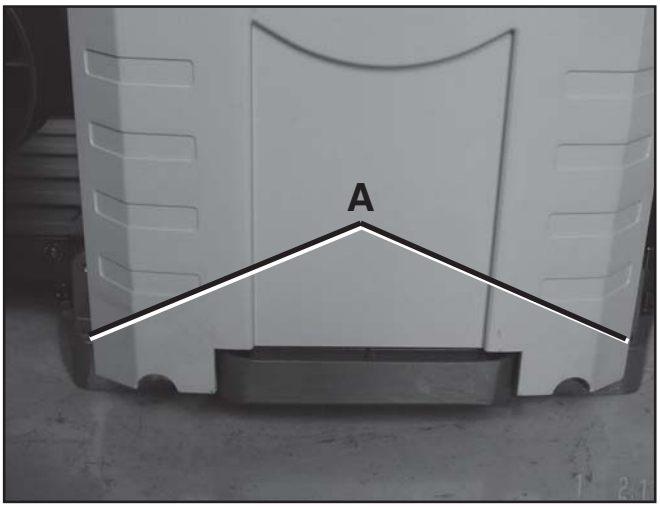
1. Install the dust port in the rear of the planer by tigthening the soc head cap screws. (4) supplied. **SEE FIG 2.**

Fig. 2

SECURING PLANER TO A TABLE OR WORKBENCH

During operation, if there is any tendency for the planer to tip over, slide or walk, the planer MUST be secured to a supporting surface such as a workbench or table. Four holes are provided (2 are shown at (A)) to securely mount the planer. The surface you are mounting the planer to should be perfectly flat. SEE FIG 3.

Fig. 3



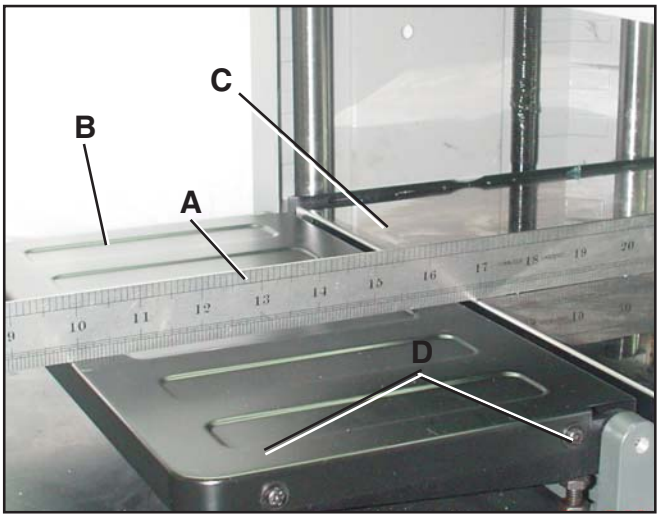
ADJUSTMENTS

LEVELING EXTENSION TABLES

The extension tables must be level with the planer table. To check the extension tables and adjust if necessary:

1. Lay a straight edge (A) on the planer table (C) with one end of the straight edge over the infeed table (B). **SEE FIG 4.**

Fig. 4



2. Check to make sure that the infeed table is level with the planer table.

3. If an adjustment is necessary, loosen and adjust Pan Head Screws (2) (D) on each side of the table until the infeed table is level with the planer table. This will adjust the outer edge of the infeed table.

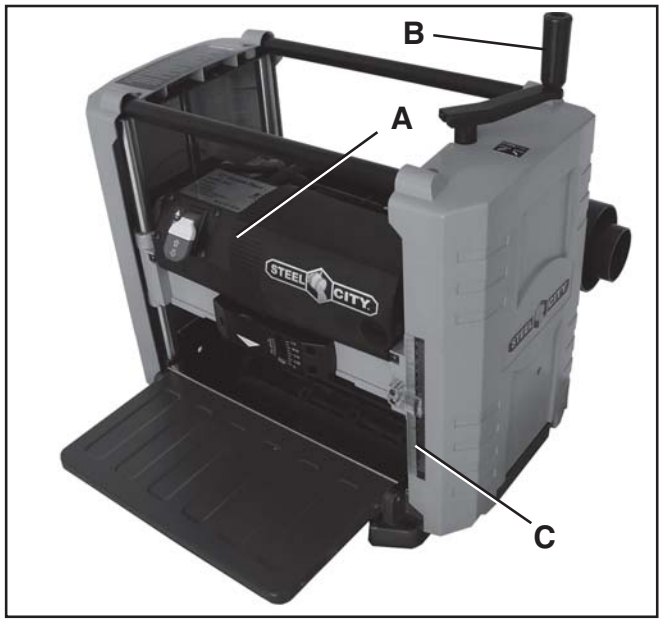
4. Repeat this process for adjusting the outfeed table.

RAISING AND LOWERING HEAD ASSEMBLY

The head assembly consists of the cutterhead and knives, feed rollers, cutterhead guard, and the motor. Raising and lowering of the head assembly controls the depth of cut on the planer. To adjust:

1. To raise the head assembly (A), turn the adjusting handle (B) clockwise. **SEE FIG 5.**

Fig. 5



2. To lower the head assembly, turn the adjusting handle counterclockwise.

NOTE: One revolution of the handle will move the cutterhead up or down approximately 1/16". You can confirm this by referencing the scale (C) on the right side of the planer.

ADJUSTING / REPLACING KNIVES

The knives supplied with the planer have an edge on both sides of the blade enabling you to flip the knives over when one edge becomes dull or pitted. To change:

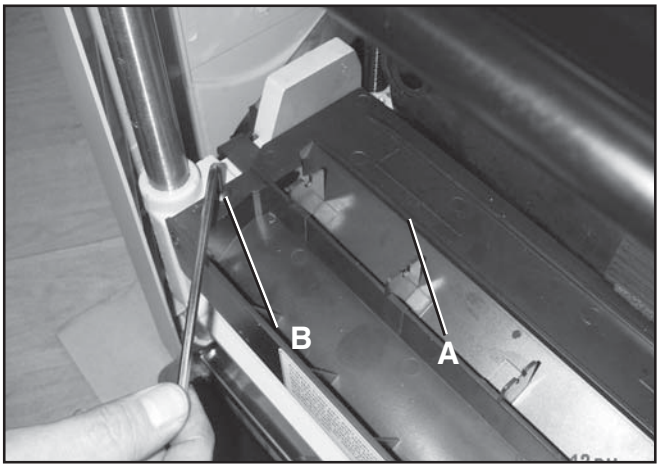
⚠WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

1. Remove the Dust Chute or Dust Port. Refer back to the section labeled ATTACHING DUST PORT OR DUST CHUTE in the ASSEMBLY section for information on removing the Chute or Port.

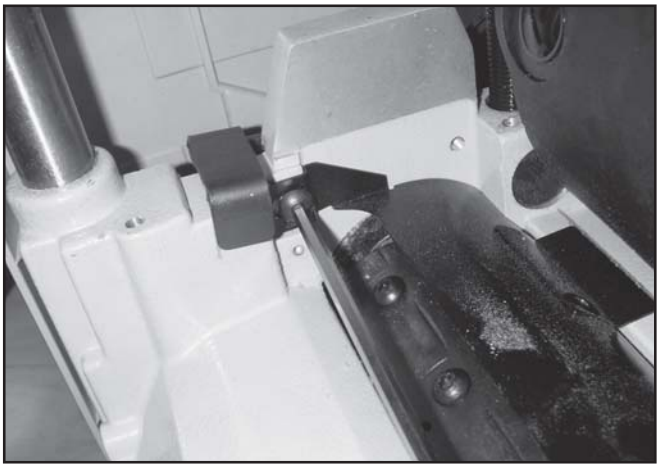
2. Remove the cutterhead guard (A) by removing the Hex Soc Head Cap Screws(B). **SEE FIG 6.**

Fig. 6



3. Hold the Cutterhead lock and rotate the cutterhead with the supplied Hex wrench. Rotate it to the position where the sharp edge of the blade is not visiable from your sight angle. **SEE FIG 7.**

Fig. 7

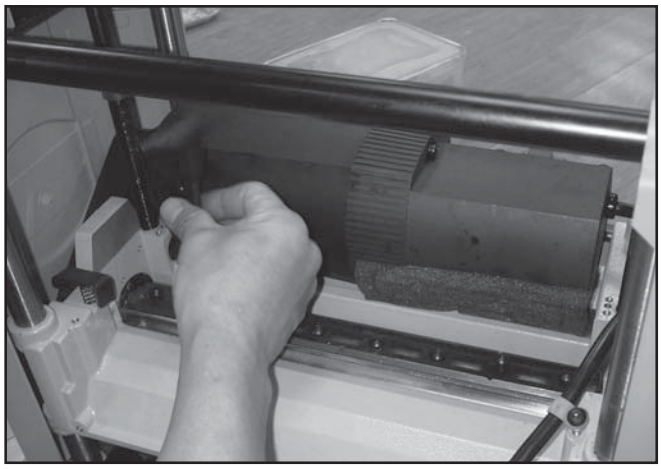


4. Loosen the screw on both sides and remove the defector. Use the elevating handle to low down the upper frame to 2".

Fig. 8

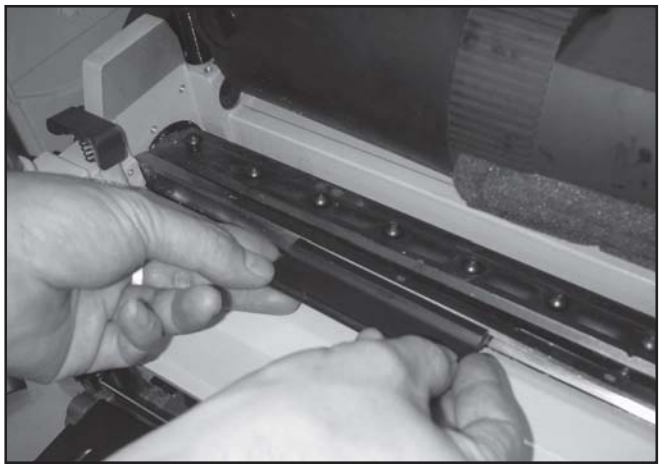
5. Use the supplied Hex wrench, insert it into the side cover hole. Rotate it to the lock position. **SEE FIG 8.**

Fig. 9



6. Using the supplied hex wrench, unscrew the eight screws just enough so that the locking bar separates from the knife, allowing the knife to be removed. Do not completely remove the screws. Insert the magnetic knife removal tool underneath the center of the locking bar. **SEE FIG 9 & 10.**

Fig. 10



7. Lift the tool up until the knife separates from the pins and remove the knife.

8. Rotate the knife 180 degrees so that the edge of the knife that was facing you is now facing away from you and reinsert the knife. If you have already used both edges of the knife, replace the knife at this time

9. Place the magnetic knife removal tool on top of the knife. Make sure that the tool is centered on the knife.

10. Place the knife on the pins in the cutterhead and remove the knife removal tool.

NOTE: When placing the knives on the pins, you will notice that there is some side to side movement available in the knife. This is normal as it allows for repositioning of the knives in case one of the knives gets a nick in it.

11. Retighten the eight screws loosened.

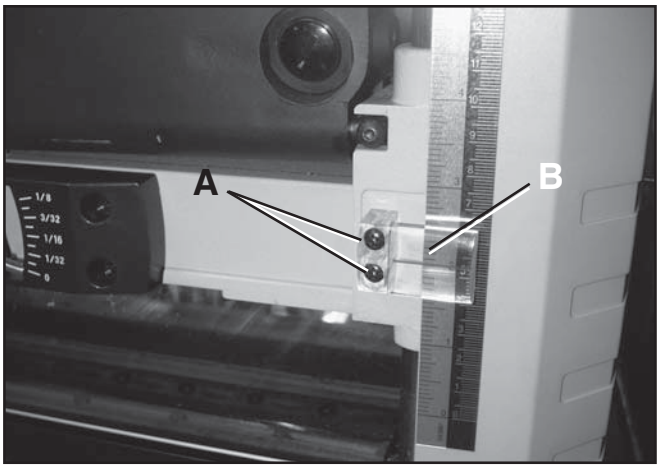
12. Repeat this process for the remaining two knives.

NOTE: In order to rotate the cutterhead, you will have to depress the red lever. This will unlock the cutterhead allowing you to rotate it to the next knife to be changed.

THICKNESS SCALE ADJUSTMENT

The thickness scale, located on the right of the planer, shows the thickness of the finished workpiece. To make sure the scale is set properly, run a piece of wood through the planer and measure the thickness of the wood. If the scale is out of alignment, loosen the two round head screws (A) holding the scale indicator (B) and adjust the thickness indicator to the correct setting. Make sure to re-tighten the two screws once the adjustment is complete. **SEE FIG. 11**

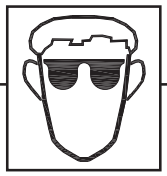
Fig. 11



OPERATIONS

NOTICE: This operations section was designed to give instructions on the basic operations of this planer. However, it is in no way comprehensive of every planer operation. It is strongly recommended that you read books, trade magazines, or get formal training to maximize the potential of your planer while minimizing the risks.

⚠WARNING



ALWAYS wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools.

⚠WARNING

ALWAYS wear a NIOSH/OSHA approved dust mask to prevent inhaling dangerous dust or airborne particles.

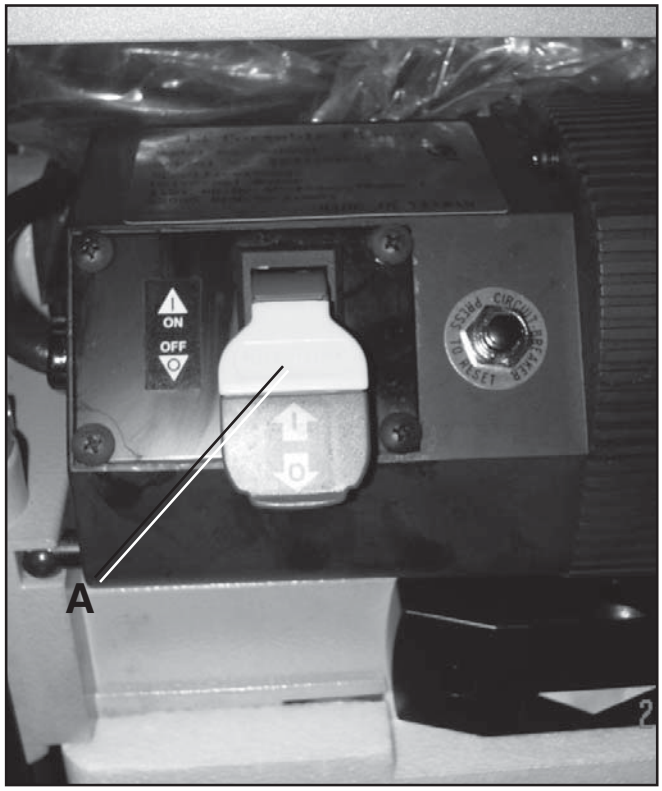
⚠WARNING

This planer is designed to process wood **ONLY.**

POWER SWITCH

The planer is turned on by flipping the switch into the up position and it is turned off by flipping the switch in the down position. This planer is also equipped with a special lockout toggle switch that prevents unauthorized use. To prevent unauthorized use of the planer, simply pull out the yellow key (A) located on the face of the switch. **SEE FIG 12.**

Fig. 12

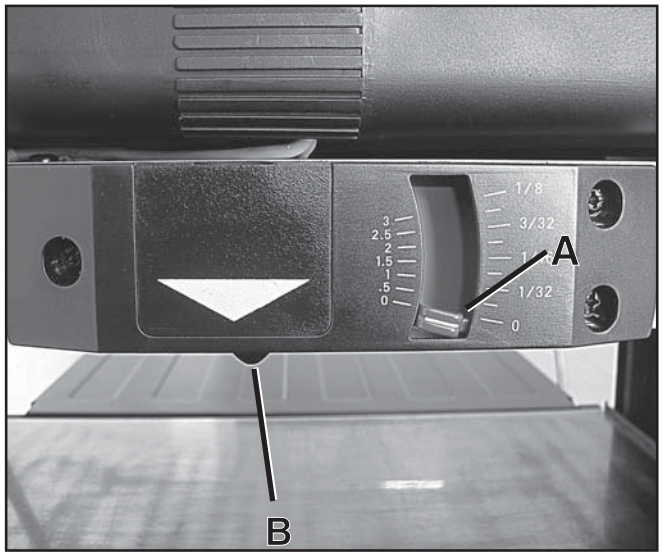


DEPTH OF CUT SCALE

The Depth Of Cut Scale, located on the front of the machine, is a convenient way to quickly determine how much material is being planed off in one pass.

1. With the machine OFF, insert your workpiece just under the depth of cut scale (A). **SEE FIG 13**

Fig. 13



2. Crank the raising / lowering handle until the button (B) comes in contact with the workpiece.

3. As you rotate the raising / lowering handle, the needle on the depth of cut scale will move showing you how much material will be removed in that pass.

GETTING PREPARED

It is always a good idea to use a piece of scrap wood for your first planing attempt. Also, before each use of the planer, make it a habit of checking for loose fasteners, fittings or hardware. Turn the planer ON and allow it to reach full speed. Pay close attention to any excessively loud noises that may be coming from the planer or any excessive vibration. If either occurs, shut down the planer immediately checking again for loose hardware. Go through the ASSEMBLY and ADJUSTMENTS sections again if necessary.

BASIC OPERATION

⚠WARNING

To avoid serious personal injury, **NEVER** stand directly in line with the front or rear of the planer. If an object is thrown from the planer, it will travel in this direction.

1. Stand to either the left or right side of the planer.

2. Flip the switch to the ON position.

3. Lift the workpiece onto the infeed table by grabbing the edges of the board at the middle of the length.

NOTE: For longer pieces, be sure to use additional supports or stands

4. Push slightly on the board and allow the feed rollers to pull the board through the planer. Once the feed rollers start to pull the workpiece through, let go of the board and allow the rollers to do their job. **DO NOT** push or pull on the workpiece once the rollers have engaged.

5. Move to one side of the rear of the planer and receive the planed workpiece by grabbing the edges of the wood, just like you did when feeding the workpiece in.

6. It normally takes several passes of varying depths to achieve a smooth finish, so repeat this process as many times as necessary. Remember the less you take off in a pass, the smoother the finish will be.

THICKNESS PLANING

Thickness planing sizes the workpiece to a desired thickness, while at the same time creating a smooth and level surface. The thickness of each cut will depend on the type of wood, width of the workpiece, and condition of the workpiece (i.e. dryness, grain composition, straightness, etc). Always make thin test cuts on a scrap piece of wood prior to performing cuts on the workpiece.

GENERAL TIPS AND GUIDELINES

- Thickness planing always works best when at least one side of the workpiece has a flat surface. If both sides of the workpiece are rough, feed one face of the board over a jointer until the entire surface is flat

- **ALWAYS** plane both sides of the workpiece to reach the desired thickness

- **DO NOT** plane workpieces less than 1/8-in thick, less than 3/4-in wide, or shorter than 7-in long

- It is not recommended to use the planer at it's maximum depth of cut (1/16") and at it's full width (13"). Continuous use at the maximum settings will shorten the life of the motor.

- Light cuts create a smoother finish than heavier cuts

- If a smooth cut is not obtained, try reversing the board for proper grain orientation.

AVOIDING SNIPE

Snipe, gouging or depression of the board at the ends, can occur when the board is not properly supported. For workpieces longer than 4 ft, greater care must be taken to reduce the problem because the additional length of the workpiece translates into more unsupported weight pulling down on the end of the board. This unsupported weight will work against keeping the stock flat. Make sure to use supports or stands whenever long pieces are being planed to avoid this problem. Since snipe occurs at the end of the boards, it is good practice to start with a workpiece that is slightly longer than what you need so that you can simply cut

MAINTENANCE

Your planer should provide you with a long time of service provided you take the time to perform the following maintenance operations.

A quality paste wax should be applied to the planing table surface to ease the movement of the workpiece across it. Be sure to buff off all excess wax so that it does not get absorbed into the wood when planing.

Having clean feed rollers is essential for optimal results. Check feed rollers after each use for buildup of pitch, gum, or resin and be sure to clean off with a non flammable tar and pitch remover

Any moving parts should be cleaned regularly with a penetrating oil and lubricated with a light coating of medium weight machine oil

GEAR LUBRICATION

The gears in the gear box should be lubricated periodically.

⚠WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

1. Remove the socket head cap screw (A) located on the top of the machine side panel. You will also need to remove the pan head screw with washer (B), located in the same position on the rear of the planer. **SEE FIG 14 & 15.**

Fig. 14

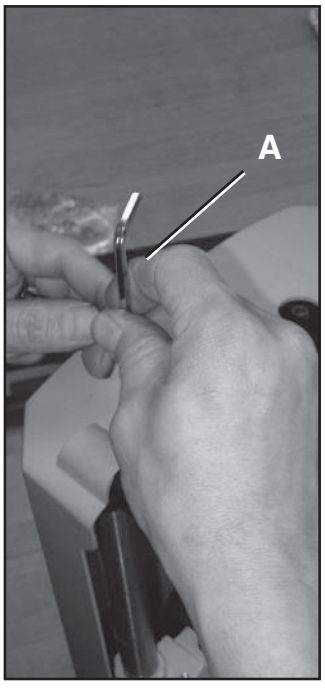
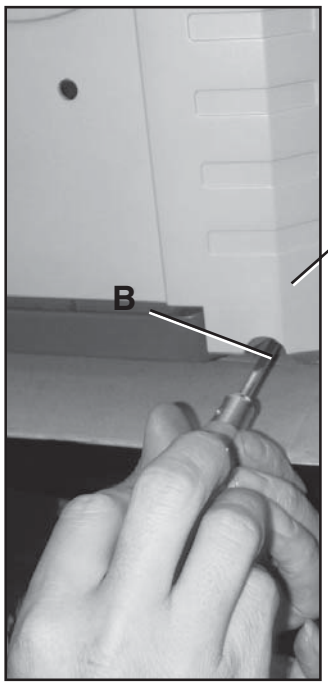
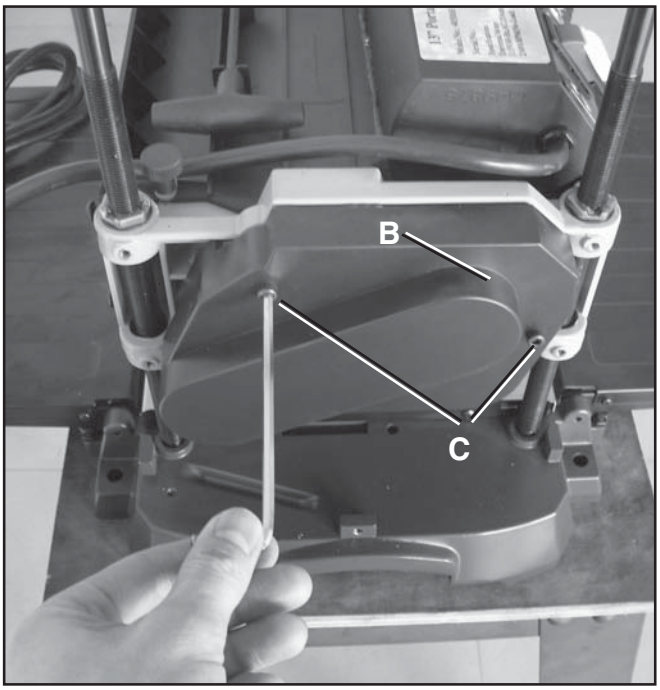


Fig. 15



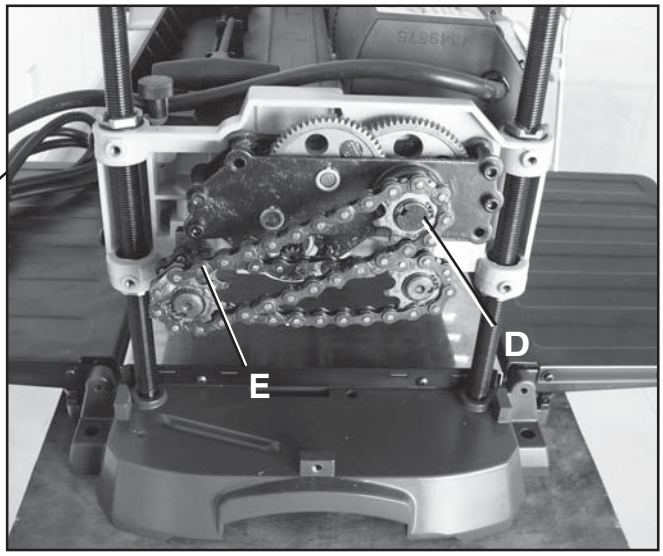
2. Remove the side panel to expose the gear box cover (B). **SEE FIG 16.**

Fig. 16



3. Remove the two screws (C) in order to remove the gear box cover and access the gear box
4. Place a light coat of multi purpose grease on the teeth of the gears (D) and a light coat of spray lubricant on the chain (E). Do not over-lubricate. **SEE FIG 17.**

Fig. 17



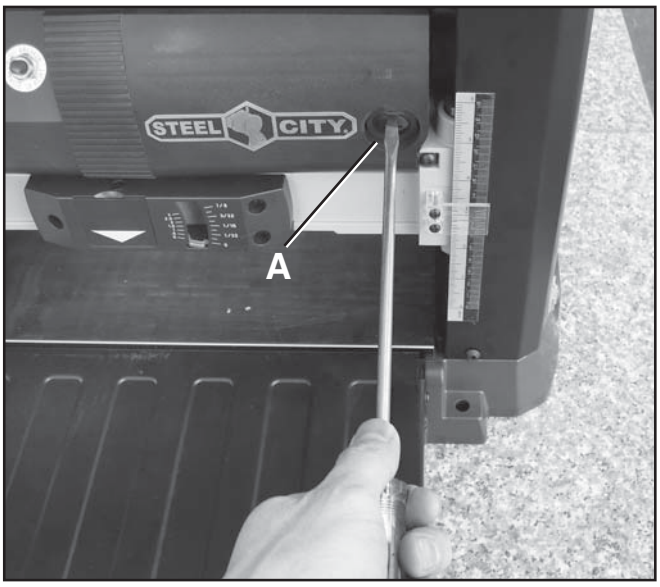
5. Replace all covers and guards that you removed once lubrication is complete.

BRUSH REPLACEMENT

Brush life will vary depending on the load placed on the motor. The brushes should be inspected every 10-15 hours of use. To inspect

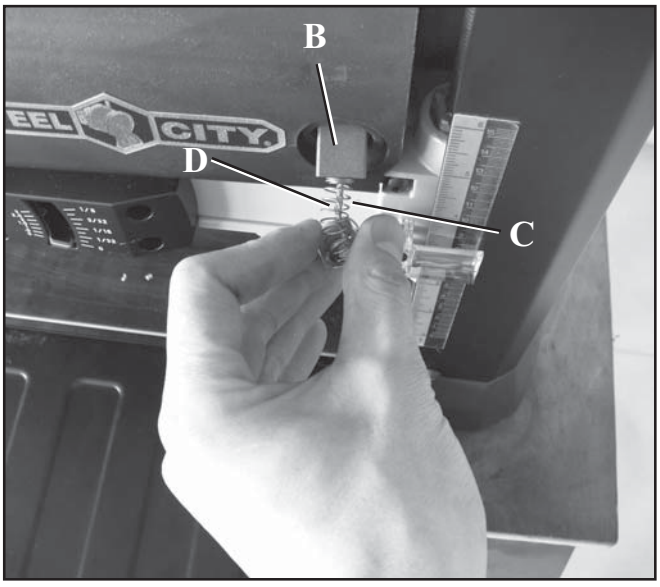
1. Remove the Brush Holders, one of which is shown at (A). The other is located in the same position on the rear of the motor assembly. The Brush Holder can be removed using a flat blade screwdriver. **SEE FIG 18.**

Fig. 18



2. Once the brush has been removed, inspect the carbon (B), the spring (C), and the wire (D). **SEE FIG 19.**

Fig. 19



3. If the carbon of either brush is worn down to 3/16" or less, both brushes should be replaced. Also if the spring or wire are burned or damaged in any way, both brushes should be replaced.

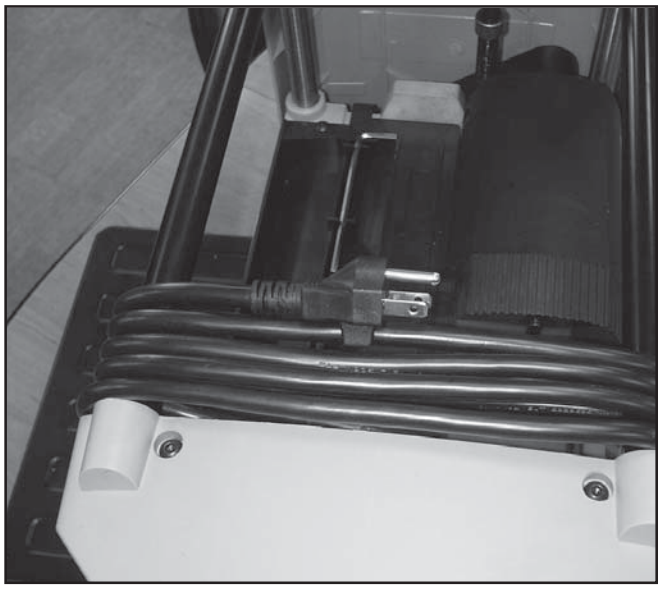
BLADE REPLACEMENT

For information on replacing blades refer to the section labeled ADJUSTING / REPLACING KNIVES in the ADJUSTMENT section of this manual.

ORGANIZING POWER CORD

Power cord can be organized by circulate on the top two stock rollers. Clip the plug to the cord. **SEE FIG. 20**

Fig. 20



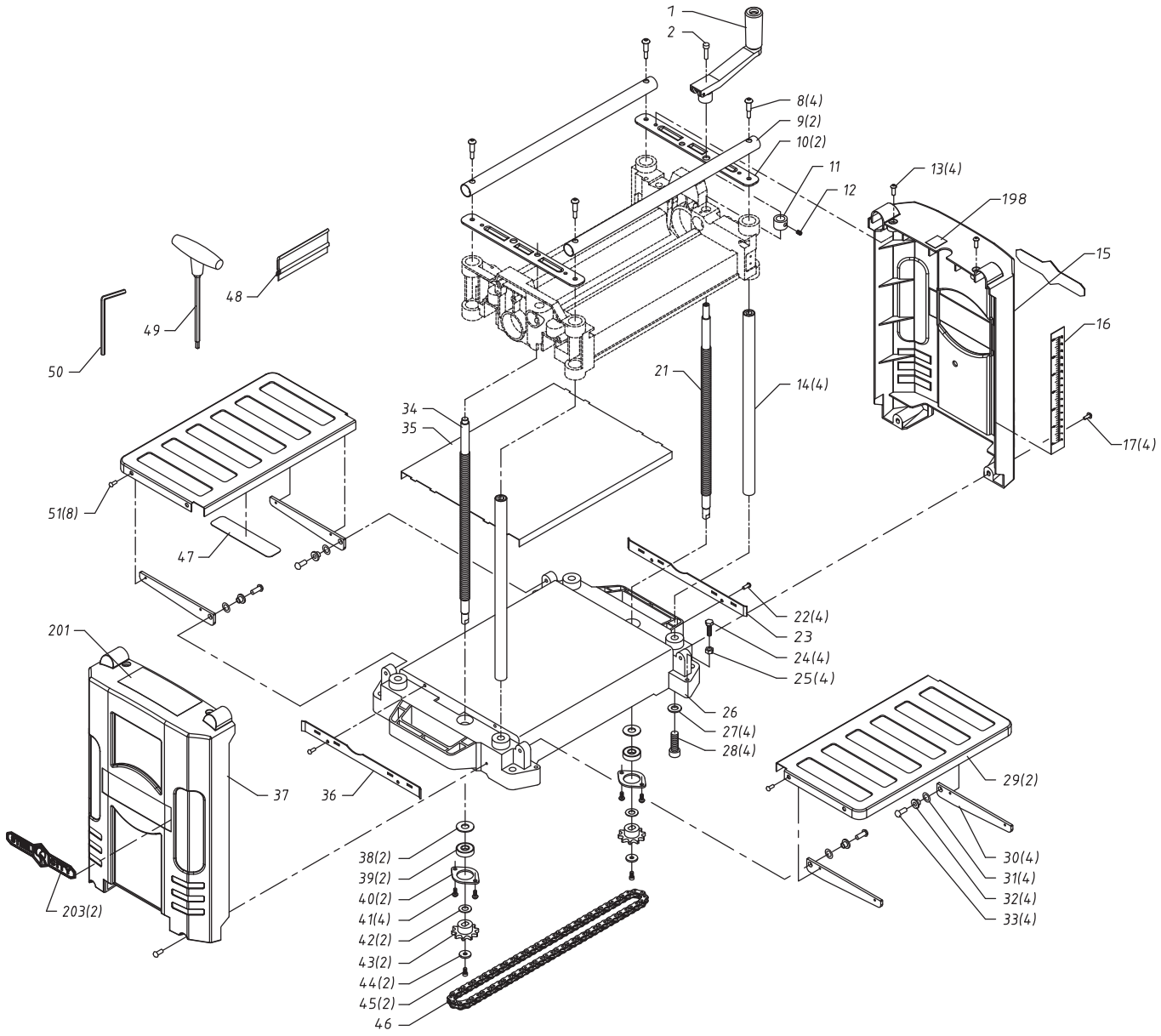
TROUBLESHOOTING GUIDE

Motor and Machine Operation

PROBLEM	LIKELY CAUSE(S)	SOLUTION
Snipe (depressions at end of workpiece)	Dull cutter blades. Infeed or outfeed tables out of adjustment.	Replace or turn cutter blades. Readjust tables.
Torn grain.	Too deep a blade setting. Workpiece being fed against grain. Dull cutter blades.	Reduce depth of cut. Feed other end of board first. Replace or turn cutter blades.
Fuzzy/rough grain.	High wood moisture content. Dull cutter blades. Too deep a blade setting. Incorrect feeding speed.	Dry wood before planing. Replace or turn cutter blades. Reduce depth of cut. Use slower feed rate.
Board thickness does not match depth scale indicator.	Depth scale incorrectly set.	Adjust depth scale.
Will not start.	Not plugged in. Blown circuit. Lockout key removed.	Check power source. Replace fuse, reset breaker, or call electrician. Replace lockout key.
Interrupted operation.	Unit overloaded. Circuit overloaded.	Reduce load. Operate on circuit separate from other appliances or motors or connect to circuit with adequate amp rating.

◆ NOTES ◆

PARTS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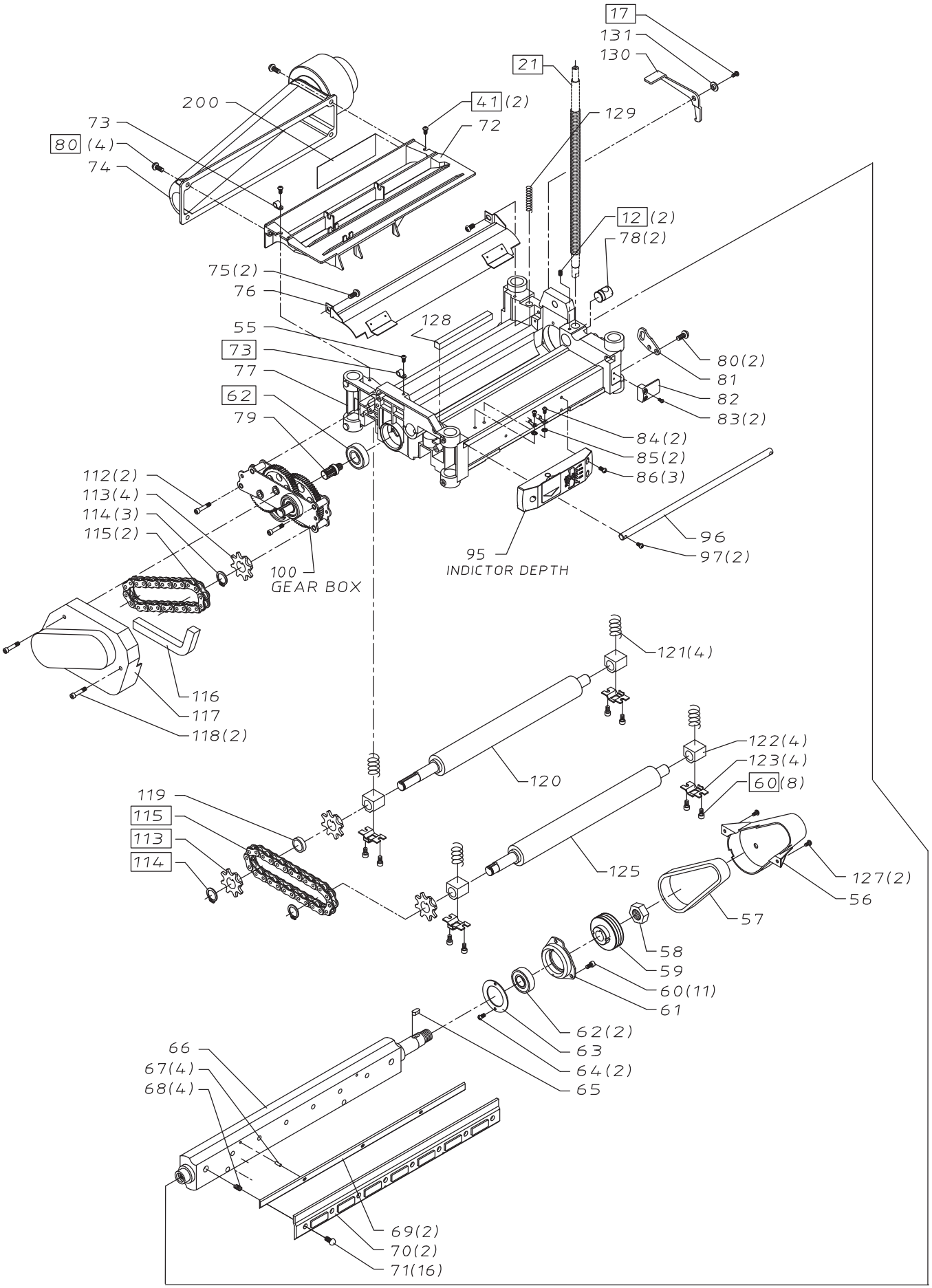
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INDICTOR DEPTH
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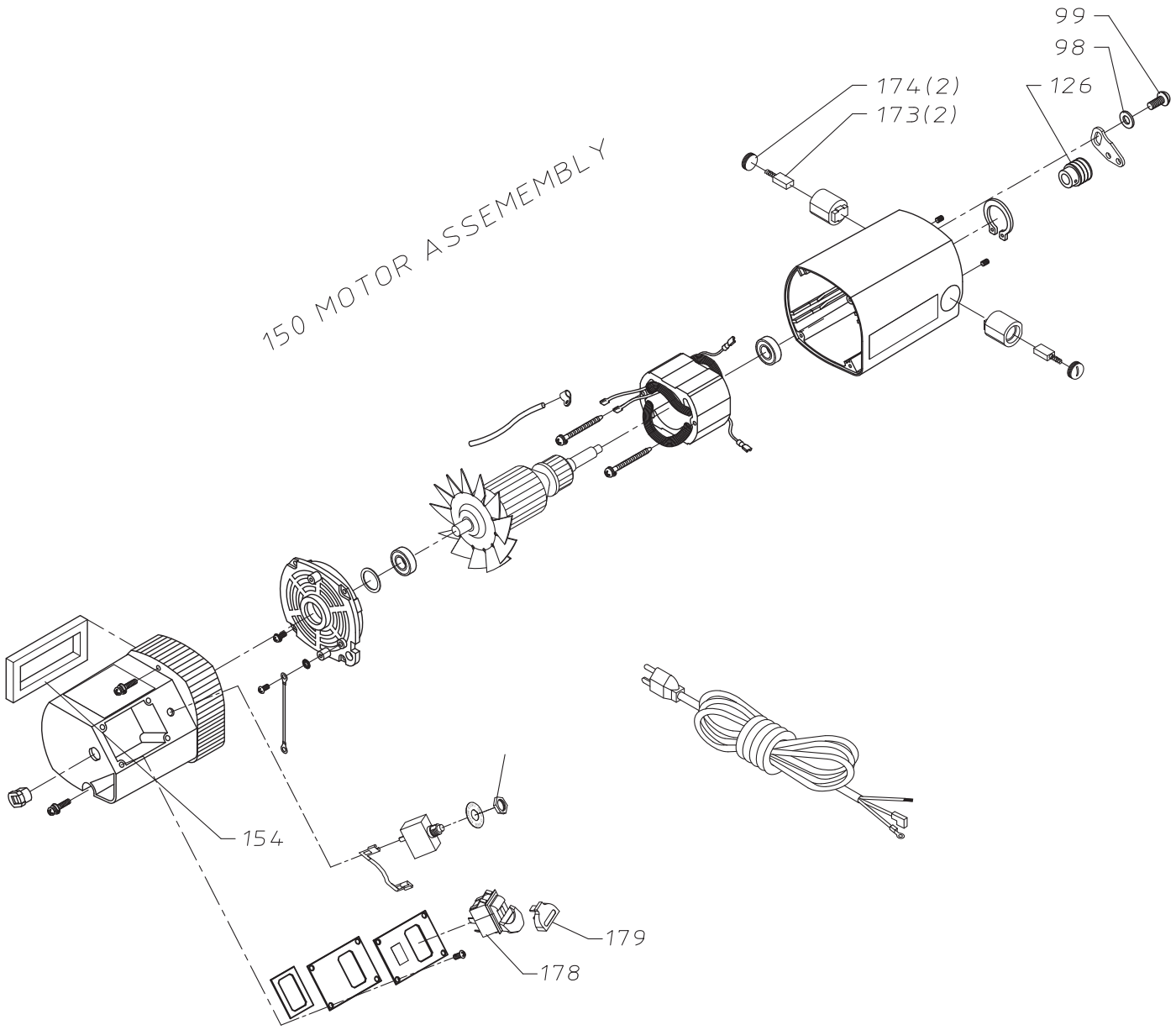
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178

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	ST00103	HANDLE ASSEMBLY	1
2	ST00002	M5xP0.8x20L HEX SOC HD SCR	1
8	ST00104	M6xP1.0 SPECIAL HEX SOC HD CAP SCR	4
9	ST00105	CONNECTION TUBE	2
10	ST00106	CONNECTION PLATE	2
11	ST00010	SPACER	1
12	ST00011	M5xP0.8x5L NYLOCK SCR SOC SET CUP PT	3
13	ST00107	M6xP1.0x10L HEX SOC HD CAP SCR	4
14	ST00108	COLUMN ASSY	4
15	ST00109	RIGHT SIDE COVER	1
16	ST00015	SCALE	1
17	ST00110	M5xP0.8x12L PAN HD SCR W/WASH	5
21	ST00111	HEIGHT ADJ SPINDLE	1
22	ST00112	M4xP0.7x10L PAN HD SCR	4
23	ST00023	BASE GUIDE RAIL RIGHT	1
24	ST00025	M6xP1.0x20L HEX HD SCREW	4
25	ST00026	M6xP1.0 HEX NUT	4
26	ST00113	BASE	1
27	ST00114	SPRING WASHER	4
28	ST00115	M10xP1.5x40L HEX SOC HD SCR	4
29	ST00116	INFEED / OUTFEED TABLE	2
30	ST00117	TABLE SUPPORT	4
31	ST00042	SPRING WASHER	4
32	ST00043	TABLE BUSHING	4
33	ST00044	M6xP1.0x16L PAN HD SCR	4
34	ST00118	SPINDLE	1
35	ST00119	WEAR PLATE	1
36	ST00035	BASE GUIDE RAIL LEFT	1
37	ST00120	LEFT SIDE COVER	1
38	ST00027	FLAT WASHER	4
39	ST00028	SPINDLE BEARINGS (6000ZZ)	2
40	ST00029	BASE BEARING RETAINER	4
41	ST00030	M5xP0.8x12L SPECIAL HEX SOC HD CAP SCR	6
42	OR94539	FLAT WASHER	4
43	ST00032	SPINDLE SPROCKET	4
44	ST00033	FLAT WASHER	4
45	ST00034	M4xP0.7x12L NYLOCK HEX SOC HD SCR	4
46	ST00121	ROLLER CHAIN	1
47	ST00122	TOOL HOLDER	1
48	ST00123	KNIFE REMOVAL TOOL ASSY	1
49	SC10259	TORX WRENCH	1
50	ST00059	4x120mmL HEX WRENCH	1
51	ST00040	M4xP0.7x6L PAN HD SCR W/WASH	8
55	ST00124	M5xP0.8x8L PAN HD SCR W/WASH	1
56	ST00050	BELT GUARD	1
57	ST00051	BELT	1
58	ST00052	M16xP2.0 L.H. HEX NUT	1
59	ST00053	CUTTERHEAD DRIVE PULLEY	1
60	ST00054	M5xP0.8x12L HEX SOC HD SCR	11
61	ST00055	CUTTERHEAD BEARING CUP	1
62	OR90218	CUTTERHEAD BEARING (6203zz)	2
63	ST00056	BEARING RETAINER	1
64	ST00125	M3xP0.5x8L PAN HD SELF TAP SCR	2
65	SC84509	5x5x12mm KEY	1
66	ST00126	CUTTERHEAD	1
67	ST00127	CUTTERHEAD PIN	4
68	ST00128	SPRING	4
69	ST00129	KNIVES	2
70	ST00130	KNIVES LOCKING BAR	2
71	ST00131	M6xP1.0x16L KNIVES TORX SCREW	16
72	ST00060	DUST CHUTE	1
73	ST00061	POWER CORD CLAMP	1
74	ST00062	ADAPTER	1
75	ST00063	M6xP1.0x10L HEX SOC HD CAP SCR	2
76	ST00064	DEFLECTOR	1
77	ST00132	UPPER FRAME	1
78	ST00133	ELEVATION NUT	2
79	ST00067	CUTTERHEAD PINION GEAR	1
80	ST00068	M6xP1.0x12L HEX SOC HD CAP SCR	6
81	ST00069	MOTOR MTG PLATE	1
82	ST00070	CURSOR	1
83	OR94533	M3xP0.5x20L RUND HD SCR	2
84	ST00072	M5xP0.8x8L PAN HD SCR L/WASH	2
85	OR90362	EXT TOOTH WASHER	2
86	ST00074	M4xP0.7x12L PAN HD SCR	3
95	ST00075	INDICATOR DEPTH ASSY	1
96	ST00076	MOTOR PIVOT ROD	1
97	ST00077	M5xP0.8x16L HEX SOC HD CAP SCR	2
98	ST00078	FLAT WASHER	1
99	ST00079	M8xP1.25x20L HEX SOC HD CAP SCR	1
100	ST00080	GEARBOX ASSY	1
112	ST00081	M5xP0.8x35L HEX SOC HD SCR	2
113	OR72743	SPROCKET	4
114	OR94549	RING-EXT RET	3
115	ST00084	GEARBOX DRIVE CHAIN	2
116	ST00085	CUSHION	1
117	ST00086	GEARBOX GUARD	1
118	ST00087	M5xP0.8x40L HEX SOC HD SCR	2
119	ST00088	SPROCKET SPACER	1
120	ST00089	OUTFEED ROLLER	1
121	ST00090	SPRING	4
122	ST00091	BEARING BLOCK	4
123	ST00092	BEARING BLOCK RETAINER	4
125	ST00093	INFEED ROLLER	1
126	ST00094	MOTOR PULLEY	1
127	ST00095	M4xP0.7x10L PAN HD SCR W/WASH	2
128	ST00096	CUSHION	1
129	ST00134	COIL SPRING	1
130	ST00135	CUTTERHEAD LOCKING	1
131	ST00136	BUSHING	1

KEY NO.	PART NO.	DESCRIPTION	QTY.
150	ST00097	MOTOR ASSY	1
154	ST00098	CUSHION	1
173	ST00099	BRUSH	2
174	ST00100	BRUSH CAP	2
178	ST00101	SWITCH	1
179	ST00102	SWITCH KEY	1
	SC75013	MANUAL (NOT SHOWN)	1

◆ NOTES ◆

STEEL CITY TOOL WORKS

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2 Year Warranty